

3/048/61/025/002/001/016
B117/B212

AUTHORS: Balashov, V. V., Neudachin, V. G., and Smirnov, Yu. F.

TITLE: Structure of light nuclei

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25,
no. 4, 1961, 170-188

TEXT: The present paper was read at the 10th All-Union Conference on Nuclear Spectroscopy (Moscow, 1960), and also at the 11th Annual Conference on Nuclear Spectroscopy (Riga, January 25 to February 2, 1961). The authors summarize the progress in the development, concerning the theory of light nuclei and mainly deal with two aspects which underly their description of the theory of light nuclei: 1) Utilization of a modern shell model to calculate the characteristics of ground states and least excited states; 2) The question of consistency of various models of light nuclei. The first chapter deals with the manybody aspects of the shell theory. A theoretical argumentation of the shell model is not given; the model is only treated as a semi-empirical method providing a simple explanation of experimental data, and at the same time furnishing a means for predicting lower-excited nuclear

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82605

Position of the Giant Resonance in the Dipole S/056/60/033/01/17/023
Absorption of γ -Quanta by Atomic Nuclei B006/B063

Yu. M. Shirokov for his discussions. There are 1 figure and 15 references:
3 Soviet, 8 US, 2 Canadian, 1 British, and 1 Dutch.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo
 universiteta
 (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: January 28, 1960 (initially) and March 11, 1960
 (after revision)

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B2605

Position of the Giant Resonance in the Dipole
Absorption of γ -Quanta by Atomic Nuclei

S/056/60/033/01/17/023
B006/B063

These calculations were made by the authors for Ca^{40} and V^{51} for which there is sufficient spectroscopic material available. The calculations are described in detail for the E1-absorption of a γ -quantum by

V^{51} , such as the transition (1): $(\nu f_{7/2})^8 (\pi f_{7/2})^3 \rightarrow (\nu f_{7/2})^8 (\nu d_{3/2}^{-1}) (\nu f_{5/2})$ ✓

$(\pi f_{7/2})^3$. The experimental data necessary for this purpose as well as their sources are given. The energy of transition (1) was estimated to be 19 + 20 Mev. Formulas for the absorption cross section are given for a) transitions from incompletely filled shells and b) transitions from filled shells. The results (E1-absorption curves) obtained for

V^{51} and Ca^{40} are shown in the first diagram; the other three diagrams contain the curves obtained for Ni^{58} , Cu^{63} , and Cu^{65} as compared to the experimental curves determined in the papers of Refs. 13 and 15. Satisfactory agreement is found also in this case. For the three last-mentioned isotopes, however, the experimental material available is comparatively poor, so that the results are not very exact. Finally, the authors thank V. V. Balashov and Yu. F. Smirnov for their helpful advice, as well as

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NEUDACHIN, V. G.

82605

S/056/60/039/01/17/029
B006/B063

24.6200

AUTHORS:

Neudachin, V. G., Shevchenko, V. G., Yudin, N. P.

TITLE:

Position of the Giant Resonance in the Dipole Absorption
of γ -Quanta by Atomic Nuclei

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki,
1960, Vol. 39, No. 1 (7), pp. 108-111

TEXT: The shell theory has already been used by Wilkinson (Ref. 1) to calculate the dipole absorption of gamma quanta and to explain the width and area of giant resonance lines. It was, however, found that the theoretical giant resonance energy was about twice as high as the experimental energy. Attempts to avoid this difficulty by introducing an "effective mass" led to an increase in the spacing between neighboring single-particle levels (~ 14 Mev), whereas the value of 6-7 Mev was experimentally confirmed. In the present article the authors show that for nuclei with $A < 70$ a consideration of the residual pair interactions in the calculation of giant resonance according to the shell theory yields values which agree with experiments, without the necessity of introducing an "effective mass".

Card 1/3

YEDAKOVA, V.A.; NEUDACHIN, V.G.; ROMANOVSKIY, Ye.A.

Possibility of the appearance of a second-order process in the
case of nonelastic deuteron scattering by nuclei. Zhur. eksp. i
teor. fiz. 38 no.1:248-250 Jan '60. (MIRA 14:9)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo univer-
siteta.

(Deuterons--Scattering)

81226
S/089/60/009/004/006/020

The Energy Dependence of the Differential Cross Sections and the Mechanism of the (d,p) Reaction B006/B070

the relative and absolute values of the reduced widths change with E_d .

Reaction	Level of the Final Nucleus (Mev)	Spin and Parity	Transition	Reduced Widths				
				$E_d = 8$	8.9	9	14.8	19 Mev
$C^{12}(d,p)C^{13}$	ground level	$1/2^-$	$p^8 \rightarrow p^9$	2.2	1.3	1.2	1.9	0.9
	3.09	$1/2^+$	$p^8 \rightarrow p^8 s_{1/2}$	3.0	3.8	6.5	8.3	1.6
	3.684	$3/2^-$	$p^8 \rightarrow p^9$	0.16	0.48	0.38	0.28	-
	3.855	$5/2^+$	$p^8 \rightarrow p^8 d_{5/2}$	3.5	2.6	1.4	5.7	1.1
				$E_d = 4.11$	7.7	7.73	9	19.1 Mev
$O^{16}(d,p)O^{17}$	ground level	$5/2^+$	$p^{12} \rightarrow p^{12} d_{5/2}$	0.66	1.0	2.5	3(rel.)	1.8
	0.875	$1/2^+$	$p^{12} \rightarrow p^{12} s_{1/2}$	1.1	2.6	7.0	9(rel.)	3.7
				$E_d = 8$	9	14.8	Mev	
$N^{14}(d,p)N^{15}$	ground level	$1/2^-$	$p^{10} \rightarrow p^{11}$	2.1	-	1.0		
	6.33	$3/2^-$	$p^{10} \rightarrow p^{11}$	-	0.23	0.18		
	8.32	$1/2^+$	$p^{10} \rightarrow p^{10}_{1/2}$	11.5	4.5	5.4		

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S/089/60/009/004/006/020
B006/B070

24.6600
AUTHORS:

Belyayev, V. B., Zakhar'yev, B. N., Neudachin, V. G.

TITLE: The Energy Dependence of the Differential Cross Sections and the Mechanism of the (d,p) Reaction ¹⁹

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 4, pp. 298 - 300

TEXT: The present "Letter to the Editor" gives the results of an analysis of the experimental data on stripping reactions. $d\sigma/d\Omega$ is represented as a function of the relative reduced level widths γ^2 in Born approximation, and the dependence of γ^2 on the deuteron energy E_d is described by Butler's formula. In order that the need for corrections to Butler's formula be as small as possible, only cases with $E_d > 4$ Mev have been selected for analysis. The results of the analysis are given in a table. The dependence of γ^2 on E_d is also given in the table. The absolute error of these data is 50%, and the relative error is 10%. In a number of cases,

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Clustering of Nucleons in Light Nuclei

76996,
SOV/56-37-6-36/55

ASSOCIATION: Institute Nuclear Physics at the Moscow State University,
USSR (Institut yadernoy fiziki Moskovskogo gosudarstven-
nogo universiteta, SSSR)

SUBMITTED: July 18, 1959

Card 4/4

Clustering of Nucleons in Light Nuclei

76996
SOV/56-37-6-36/55

From these relations the following expression was obtained for the equivalence of wave functions with LS-coupling:

$$\begin{aligned} \psi([a]LST) = A\Phi(L)\chi(S_1T_1[\alpha_1]1234)\chi(S_2T_2[\alpha_2]5678)\dots \times \\ \times \chi(S_mT_m[\alpha_m]n-\alpha_m, n-\alpha_m+1, \dots, n). \end{aligned} \quad (5)$$

This relation was applied to the calculation of the wave function of the ground states in Be^8 and B^{10} . There are 8 references, 2 Soviet, 4 U.K., 1 Swiss, 1 U.S. The U.S. and U.K. references are: J. K. Perring, T. H. Skyrme, Proc. Phys. Soc., A69, 600 (1956); K. Wildemuth, Th. Kanelopoulos, Nucl. Phys., 7, 150 (1958); 9, 449 (1959); H. Jahn, Proc. Roy. Soc., A209, 502 (1951); S. J. Biel, Proc. Phys. Soc., A70, 266 (1957); G. Raebah, Phys. Rev., 63, 367 (1943).

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Clustering of Nucleons in Light Nuclei

76996
SOV/56-37-6-36/55

(where A is antisymmetrization operator; r is symbol allowed a given $[\alpha]$; $[\tilde{\alpha}]$ and \tilde{r} are symbols analogous to $[\alpha]$ and r , but for conjugated concept). The above equation is equivalent to the usual expression:

$$\phi([\alpha]LST) = \sum_r \Phi(L[\alpha]r) \chi(ST[\tilde{\alpha}]\tilde{r}). \quad (2)$$

(cf. H. A. Jahn, H. van Wieringen, Proc. Roy. Soc., A69, 600, 1956). The following relation was obtained for the spin-orbital functions corresponding to Young's scheme with maximal symmetry (in which only α_m can be < 4):

$$\chi(ST[\tilde{\alpha}]\tilde{r}_0) = \chi(S_1 = 0T_1 = 0[\tilde{\alpha}_1]1234) \chi(S_2T_2[\tilde{\alpha}_2]5678) \dots \times \\ \times \chi(S_mT_m[\tilde{\alpha}_m]n - \alpha_m, n - \alpha_m + 1, \dots, n) = \sum_{\tilde{r}} C_{\tilde{r}} \chi(ST[\tilde{\alpha}]\tilde{r}). \quad (4)$$

Card 2/4

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76996
SOV/56-37-6-36/55

AUTHORS: Neudachin, V. G., Smirnov, Yu. F., Yudin, N. P.

TITLE: Clustering of Nucleons in Light Nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 6, pp 1781-1783 (USSR)

ABSTRACT: The equivalence of wave functions of the shell theory with LS-coupling for states with a higher symmetry of the orbital part and the antisymmetrized wave functions composed of wave functions of nucleon clusters, was demonstrated with the aid of the permutation group theory. The total wave function $\psi([a] LST)$ for the system with whole orbital momentum L, spin S, isobaric spin T, and Young's scheme for orbital part of the wave function $[a] \equiv [a_1, a_2, \dots, a_m]$ was expressed as follows:

$$\psi([a] LST) = A\Phi(L[a]r)\chi(ST[\tilde{a}]\tilde{r}), \quad (1)$$

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SSR/56-87-1-11 56

On the Use of (d,p)-Reactions for the Excitation of States With Large Spins

process also deviates from that of the ordinary stripping process. The knock-out and the spin-flip process in the (d,p)-reaction are considerably more sensitive to the nuclear Coulomb field, and as, besides, for the excitation of states with large spins the orbital moments of neutrons, which are different from zero, play the principal part, it is best to use deuterons with energies that are several times higher than the Coulomb barrier, e.g. $E_d \gtrsim 15$ Mev for $Z \sim 12$, $E_d \gtrsim 8$ Mev for $Z \sim 5$. At lower energies the peculiar features of the angular distribution are explained on the basis of the reaction ${}^{24}\text{Mg}({}^2\text{H})\text{He}^{2+}$ ($E_{\text{exc}} = 1.61$ Mev, $J^* = 7/2^+$) at 8 Mev (Ref. 11). Figure 1 shows the angular distribution of protons from this process. There are 2 figures and 13 references, 4 of which are Soviet.

ASSOCIATION: Institut yadernoy fiziki Akademiya Nauk SSSR i Moskovskiy universitet (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: May 8, 1959
Card 3/3

557/56-37-2-33/54

On the Use of (d,p)-Reactions for the Excitation of States With Large Spins

cur; the indices p and n denote proton and neutron respectively in the incident deuteron, p_2 - the departing proton. It may be seen from the equations that in a knock-out process the difference in the spins may, from the initial to the final state ΔJ , attain a much higher value than in the case of the ordinary stripping process. In order to illustrate these conditions, the authors carried out a calculation of the proton angular distribution in the knock-out process $B^{10}(d,p)B^{11*}$ ($E_{exc} = 2.14$ Mev, $J = 1/2^-$), for which the ordinary stripping process is forbidden. The calculation was carried out for the energies $E_d = 4, 8$, and 12 Mev ($R = 4.8 \cdot 10^{-13}$ cm). Results are shown by figure 1 and are compared with Butler's curves. It was found that for all energies the maximum of the curves for the ordinary stripping process is narrower than for the knock-out process. For spin-flip the condition $\vec{J}_1 + \vec{J}_n + \vec{s}_p + \vec{s}_p = \vec{J}_f$, $(\Delta J)_{max} = 3$ holds (\vec{s}_p - proton spin). The angular distribution for the

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21(7)
AUTHORS:

Neudachin, V. G., Teplov, I. B., Tulinov, A. P.

TITLE:

On the Use of (d,p)-Reactions for the Excitation of States With Large Spins

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 37, Nr 2(8), pp 548-550 (USSR)

ABSTRACT:

Gol'danskiy suggested that the inelastic scattering of complex nuclei be used for the excitation of nuclear moments with large spins; the authors of the present "Letter to the Editor" show, on the other hand, that in the case of light nuclei the same may be attained by using the (d,p) reaction. For the ordinary stripping process $\vec{J}_i + \vec{J}_n = \vec{J}_f$, $(\Delta J)_{\max} = J$ holds, where \vec{J}_i and \vec{J}_f are the spins of the initial and final states of the nucleus, respectively, J_n - the total angular momentum of the captured nucleon. Ordinary stripping is forbidden unless this condition is satisfied. In such a case, spin-flip or knock-out processes with the condition $\vec{J}_i + \vec{J}_{p_1} + \vec{J}_{n_1} = \vec{J}_f + \vec{J}_{p_2}$, $(\Delta J)_{\max} = J_1 + J_2$ hold.

Card 1/3

NEUDACHIN, V.G.; SMIRNOV, Yu.F.; YUDIN, N.P.

Nucleon association in light nuclei. Zhur. eksp. i teor. fiz. 37
no. 6: 1781-1783 D '59. (MIRA 14:10)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.
(Nuclei, Atomic) (Nucleons)

Comparison of the Differential Cross Sections of the
Reactions (dp) and (dt)

SOV/56-36-6-15/66

finally thank N. A. Vlasov and A. A. Ogloblin for discussions.
There are 3 figures, 2 tables, and 19 references, 2 of which
are Soviet.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universi-
teta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: November 24, 1958

Card 3/3

Comparison of the Differential Cross Sections of the
Reactions (dp) and (dt)

SOV/56-36-6-15/66

Butler's formulas has not the significance of an "amplitude square of the nucleon wave function on the nuclear surface" because it does not remain constant in the case of a variation of deuteron energy, but that it changes very abruptly. It is possible to explain this by the influence exercised by exchange effects in the stripping reaction (Ref 3). The authors consider the (d,t) reaction to be a special case of a stripping reaction between two complex systems and determine (in Born's approximation for plane waves) the reduced widths for the (d,t) and (d,p) reactions by comparing various triton wave functions (e.g. the Irving and the Gauss form) (Fig 1, Table 1); $\phi^2(k)$ - Fourier - Vlasov and Ogloblin (Ref 14, Fig 2). The neutron wave function, which, with respect to the deuteron in the triton shows the best agreement with experimental results, is given. For the probability of finding the triton in the (deuteron+neutron) state 0.4 is given (accurately: $0.37 \pm 20\%$), which considerably exceeds the value of 0.11 found by Werner (Ref 1). In table 2 the data of various (d,t) reactions on light elements (Refs 9-14) are compared, and from the A_0^2 -values the mean value (0.37) is determined. The authors

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307/56-38-8-15/66

21(7), 24(5)
AUTHORS:

Kurepin, A. B., Neudachin, V. G.

TITLE:

Comparison of the Differential Cross Sections of the Reactions
(dp) and (dt) (Sravneniye differentsial'nykh secheniy re-
aktsiy (dp) i (dt))

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 6, pp 1725 - 1730 (USSR)

ABSTRACT:

From the analysis of the angular distributions of tritons from (d,t) reaction there results an analogy, in the case of deuteron energies of several megavolts, between the (d,t)- and the (d,p)-mechanism, i.e. stripping reactions are concerned. The authors of the present paper investigate the problems connected herewith, viz.: a) comparison of the "reduced widths" χ^2 from (d,p) and (d,t) reactions, and b) that part of the triton wave function which corresponds to the "deuteron + neutron" state; the results obtained are compared with those obtained by other authors (Refs 1,2). As shown by an analysis of experimental data obtained in the course of recent years, (V.B. Belyayev, B. N. Zakhar'yev, and V. G. Neudachin - publication will follow), the reduced width χ^2 in

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On the Part Played by the
Exchange Effects in Stripping Reactions

SCV/56- 6-3-30/71

viz. the curves for common stripping, knock out ($\delta\delta$ -coupling),
knock out (LS-coupling), and the stripping of heavy particles,
in all cases in the range $0 \leq \theta \leq 180^\circ$. There are 2 figures
and 10 references, 2 of which are Soviet.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo
universiteta (Institute for Nuclear Physics of Moscow
State University)

SUBMITTED: September 10, 1958

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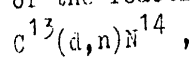
On the Part Played by the
Exchange Effects in Stripping Reactions

SOV/56-18-3-30/71

In the following, a very complicated explicit equation is given for the amplitude square of process b), I_b^2 .

- For the cases
- a) $l = 1, j = 1/2, J_1 = 1, T_1 = 0$ (jj-coupling)
 - b) $l = 1, L_1 = 0, S_1 = 1, T_1 = 0$ (LS-coupling)
 - c) $l = 0, J_1 = 1, T_1 = 0$

and some special reactions the reaction parameters are then calculated; two diagrams very clearly show the calculated curves; figure 1 shows the differential cross section of the reaction $Si^{29}(d,n)p^{30}$ in the angular range of from 0 to 80°, both for common stripping and for the knock out effect. Figure 2 shows the angular dependence of the differential cross section of the reaction



21(7)

AUTHORS:

Loudachin, . . . , Popov, I. S.,
Shevchenko, G. I.

TITLE:

On the part played by the exchange effects in stripping
reactions (o roli obmenaykh effektov v rezhimakh . . .)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki,
1959, Vol. 6, No. 3, pp 850-853 (USSR)

ABSTRACT:

Consideration of exchange effects in stripping reactions
(Refs 1-3) shows that besides the "common" stripping reaction,
two further processes must be dealt with: a) the knock-out
effect, and b) "heavy particle stripping" (Refs 2-3). In
reference 3 the problem concerning the determination of the
stripping cross section was investigated by means of an
antisymmetric wave function. In the present paper the authors
investigate b) for several simple cases. For the amplitude of
the processes it holds that

$$I = I_1 + (n-1)I_2 + (n-1)I_3$$

I_1 → "common" stripping

I_2 → case a)

I_3 → case b)

n = number of nucleons outside
the closed shell in the
primary nucleus

Card 1/3

The Genealogical Coefficients in the Generalized Nuclear Model

SOV/56-36-1-25/62

investigated. The second part of the present paper deals with the genealogical coefficients and their calculation. By means of the genealogical coefficients it is possible to express the complete antisymmetric wave function of n nucleons in form of a linear combination of the antisymmetric wave functions of $n - 1$ particles (which are vectorially connected with the wave function of the n -th particle by way of the isobaric spin). The genealogical coefficients are calculated by the method developed by P. J. Redmond (Ref 6). The calculation is described step by step. A table contains the genealogical coefficients for $n = 3$ and $n = 4$. There are 2 tables and 6 references.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: June 24, 1958

Card 2/2

24(5). 2¹(8)
AUTHORS:

Neudachin, V. G., Sainov, Yu. F.

SOV. 56-36-1-25/62

TITLE:

The Genealogical Coefficients in the Generalized Nuclear Model (Genealogicheskiye koeffitsiyenty v obobshchennoy modeli yadra)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 1, pp 186-192 (USSR)

ABSTRACT:

The present paper describes a general investigation of the problem and determines a general formula for the calculation of the genealogical coefficient. The first part of this paper deals with the number of independent states. A nucleon in the nucleus is characterized by the charge and, in addition, by 4 quantum numbers, e. g. by $n l j \Omega$, where Ω denotes the projection of the angular momentum of the nucleon on to the symmetry axis of the nucleus. The actual shape of this set of quantum numbers is not of essential importance for the here discussed problem (it is here denoted by K). First, the case is investigated in which all N_i are different. Next, a pair with equal N_i is assumed. Finally, the case with k homogeneous pairs N contained in the total number $n \gg 2k$ is

Card 1/2

Exchange Effects in Stripping Reactions

SOV/56-35-5-16/56

17 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Scientific Research Institute for Nuclear Physics of the Moscow State University)

SUBMITTED: May 9, 1958

Card 2/2

SOV, 56-35-5-16/56

24(5)
AUTHOR:

Neudachin, V. G.

TITLE:

Exchange effects in Stripping Reactions (Obmennyye efekty v reaktsii sryva)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 5, pp 1165-1170 (USSR)

ABSTRACT:

It has already been shown that the antisymmetrizing of the general wave function may in special cases exercise considerable influence on results in the case of calculations of stripping reaction cross sections (Ref 1). For his investigation the author bases upon the results of the general scattering theory (Refs 2,3) and at first operates without antisymmetrizing. In consideration of the antisymmetry of the total wave function, formulae are derived for the purpose of calculating the differential cross sections of the stripping reactions (d,p) of (d,n) in Born's approximation. The most important case of shell configuration j^{n-1} for the initial nucleus and j^n for the final nucleus is considered. In conclusion, the author thanks K. A. Ter-Martirosyan for discussing the problems at issue. There are

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On the Stripping Mechanism in Reactions With Capture
of Two Nucleons

OSV/1-1/1984/1

somewhat blurred curves characterizing the stripping stripping process. The difference between a) and b) consists in the fact that in a) the part played in the ordinary stripping theory by the value of the orbital momentum is played here by l and in b) by L . Figure 2 shows the development of the angular distribution of a process b), $Li^7(p,t)Li^6$ for $E_p = 12$ and 35 MeV, $L=0$ and figure 3 shows the same for $L=2$. In conclusion, the authors thank S.S. Vasil'yev for discussing the paper, and A.S.D. for discussing the questions raised. There are 3 figures and 15 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

Card 3/4

On the Stripping Mechanism in Reactions With C of Type
of Two Nucleons

1957)). Investigation of reactions of the general type (n,t) is carried out by two processes: a) The process of "successive stripping" (n-d-t) with the formation of deuterium in the intermediate state d, and b) Direct transition (n-t), the simultaneous capture of two nucleons. The authors investigate the angular distribution of the particles resulting; from a) and b), taking account of the shell structure of the nucleus, and derive (in Born's approximation) an expression for the differential cross section, which has the following form:

$$\frac{d\sigma}{d\Omega} = \frac{M_n M_t}{4\pi^2 h^4} \frac{k_t}{k_n} \frac{1}{(2S_n+1)(2J_t+1)} I^2.$$

Figure 1 shows the course of the curve for the angular distribution of a process of the type a, of the reaction $\text{Li}^7(p,t)\text{Li}^6$, $E_p=12$ MeV and $\theta_0=1^\circ$. For process a) as well as for process b) the development of angular distribution is very similar to the

24(5)

AUTHORS: Kozlov, V. V., Nemishin, V. G.,
Popova, A. M., Toplov, I. B.

35771 - 1974 - 4

TITLE: On the Stripping Mechanism in Reactions With Capture
of Two Nucleons (O mekhanizme sryva v reaktsiyakh
zakhvatom dvukh nuklonov)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1974,
Vol 35, Nr 4, pp 974 - 977 (USSR)

ABSTRACT: The characteristic feature of angular distribution in
the stripping reactions (d,p) and (d,n) and in the
pickup reactions (p,d) and (n,d) is a maximum within
the range of small angles. According to experiment,
the pickup process may occur also in the reactions
(n,t), (d,t), (d, α), and others. The authors of this
paper carried out a qualitative investigation of
reactions of the type (n,t), (p,t), (n,He³) and (p,He³)
(the reaction (p,t) on Li⁷ was investigated by A.I.
Baz, and A.A.Ogloblin delivered a lecture on this
subject at the Moscow Conference on Nuclear Reactions,

Class 1/4

56-4-14/54

AUTHOR: Neudachin, V.G.

TITLE: Relation between "Particle" and "Hole" Matrix Elements in the Nuclear Shell Theory (Svyaz' matrichnykh elementov dlya "chastits" i dlya "dyrok" v teorii yadernykh obolochek)

PERIODICAL: Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol. 33, Nr 4, pp. 918 - 922 (USSR)

ABSTRACT: The relation between the matrix elements for the configuration "particles" of "holes" is theoretically treated for pair-operators. The configuration j^{m-n} where $n \leq m$ (m is the total number of places in the j -shell) is called the configuration composed of "holes" in the j -shell. The properties of the configuration states j^n and j^{m-n} are in many points equal. The following cases are concretely discussed: Central, tensor, spin, and path forces, expressed in two-part operators. There are 3 Slavic references.

Card 1/2

Card 2/2

NEUDACHIN, V.G.

NEUDACHIN, V.G.

The structure of nuclei of the shell. Vest.Mosk.un.Ser.mat.,
mekh., astron., fiz., khim. 12 no.2:111-116 '57. (MIRA 10:12)
(Nuclei, Atomic)

ILLEGIBLE

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Žurn.eksp.i teor.fis, 31, fasc.5, 892-893 (1956) CARD 2 / 2 PA - 1928
 differences of the binding energies of the mirror-image-like nuclei on the
 assumption of the charge independence of the nuclei. Also the numerical values
 of these parameters are given. The computation of the matrix elements results
 in the following values of the squares of the admixture amplitudes for the
 ground states: nucleus: Li_3^6 , F_9^{18} , Sc_{21}^{42}

$$a_{TT'}^2 = \begin{matrix} 5 \cdot 10^{-5} & 4 \cdot 10^{-4} & 1 \cdot 10^{-2} \\ T = 0 & & T' = 1 \end{matrix}$$

These values are typical for the nuclei of the corresponding shells. For nuclei
 with the shell $1 f_{7/2}$ hardly any experimental material is available, but some
 conclusions can nevertheless be drawn. The distinct difference between the values
 of ft for the mirror-image-like and not mirror-image-like transitions permits
 the conclusion to be drawn that the squares of the amplitudes of the admixtures
 (with respect to isobaric spin) amount to not more than some percents. As long
 as in a stable nucleus the exterior neutrons and protons can be in one shell,
 T is a good quantum number. On the occasion of transition to heavier nuclei,
 proton- and nucleon-shells are investigated separately and isobaric spin is
 then not used as a quantum number.

INSTITUTION:

NEUDATSIN, V G.

CARD 1 / 2

PA - 1928

SUBJECT USSR / PHYSICS
 AUTHOR NEUDACIN, V.G.
 TITLE The Accuracy of the Isobaric Spin in Nuclei with the Shell $1 f_{7/2}$.
 PERIODICAL Zhurn. eksp. i teor. fis., 31, fasc. 5, 892-893 (1956)
 Issued: 1 / 1957

L. RADICATI computed the accuracy of the isobaric spin T in the lightest nuclei on the assumption that the inaccuracy of T is only due to COULOMB'S forces. The author carried out similar computations for the nuclei with the shells $1d$ and $1 f_{7/2}$ according to the method developed by G. RACAH, Phys. Rev. 62, 367 (1948). First the various types of matrix elements are given. The inaccuracies of the isobaric spin of the lowest states of the nucleus connected with matrix elements of this type amounts to from 10^{-4} to 10^{-6} (squares of the amplitudes of admixtures?). This inaccuracy depends comparatively little upon what configurations and what coupling type (LS- or jj-coupling) are investigated. While exchange interaction is neglected, an expression for the operator of COULOMB'S interaction of nucleons of the exterior not filled shell with the skeleton of the filled shells is given. The matrix element which is nondiagonal with respect to T becomes equal to zero because of the known orthogonality of the genealogical coefficients. This applies also if exchange interaction is taken into account and if the matrix element is written down in the most rigorous form. Computations were carried out by means of the wave functions of the oscillator and the parameters of these wave functions were essentially determined from the

Zurn.eksp.i teor.fis, 31, fasc.5, 891-891 (1956) CARD 2 / 2 PA - 1923

occasion characterized by the configuration j^n). In the aforementioned nuclei of Ca^{43} and V^{51} the selection rules for v forbid the transition M1 from any level of configuration $(f_{7/2})^n$ to the ground level of this configuration $v=1, j=j_{7/2}-$.

On the occasion of the j -transitions M1 and M3 it holds for the case of the configuration j^n , which is formed by neutrons and protons ($|M_T| < n/2$), that $\Delta v = 0, \pm 2, \Delta T = \pm 1, 0$. For the cases in which the isobaric spin T of the initial- and end states is equal to zero it applies that $\Delta v = 0$. For E2 radiation the selection rules $\Delta v = 0, \pm 2$ apply, which, however, are of no practical value. - The selection rules for the transitions M1 and M2 can also be derived in a very illustrative manner. Also the wave function of the state with the configuration j^n and with the seniority v is written down. The operator of the transition M1 is a pseudovectorial operator, and therefore the matrix element of the transition between a state with the wave function $\psi_0^o(1,2)$ and a state with the wave function $\psi_{M, J'}^{J, (1,2)}$ (where J' can be only even) is equal to zero. It is just this that means that transitions with $\Delta v \neq 0$ are forbidden. An experimental re-examination of the selection rules is of practical use only in the case of nuclei that are heavier than Ca^{40} . Such experiments can, in the case of nuclei with a $1 f_{7/2}$ -shell, above all determine whether a j - j coupling or an intermediary coupling exists, and whether collective interaction is essential.

INSTITUTION:

NEUDACHIN, V G.

CARD 1 / 2

PA - 1923

SUBJECT USSR / PHYSICS
 AUTHOR NEUDACHIN, V.G.
 TITLE The Selection Rules for the Quantum Number "Seniority" in Nuclear Reactions.
 PERIODICAL Zhurn.eksp.i teor.fis, 31, fasc.5, 891-891 (1956)
 Issued: 1 / 1957

At present the degree of accuracy of this quantum number (here denoted by v) is not yet clear. This problem is closely connected with the exactness of j - j -coupling. In order to be able to determine the necessary experimental material one must examine how the selection rules are satisfied with respect to v in nuclear reactions. These rules can be obtained easily on the basis of the results obtained by various of the works cited here.

On the occasion of a reaction with the capture or emission of a j -nucleon (initial configuration j^n , end configuration j^{n+1} or vice versa) it holds that $\Delta v = +1$. In particular, a stripping reaction on even-even nuclei (as e.g. in the shell $f_{7/2}$) need not lead to the production of a nucleus in the excited state $J = 7/2$ ($T = T$ of the ground state) with $v = 3$. However, such excited states of the nuclei with the shell $f_{7/2}$ have as yet not been observed experimentally.

On the occasion of the transitions $M1$ and $M2$ in the nuclei in which, outside the filled shells, only neutrons (e.g. Ca_{20}^{43}) or only protons (e.g. V_{23}^{51}) are present, it applies that $\Delta v = 0$. (The aforementioned neutrons or protons are on this

NEUDACHIN, V. G.

NEUDACHIN, V. G. -- "On the Problem of Quantum Numbers and Calculation Methods in the Theory of Nuclear Shells." Moscow Order of Lenin and Order of Labor Red Banner U imeni M. V. Lomonosov. Moscow, 1955. (Dissertation for the Degree of Candidate of Physicomathematical Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

ANDREYEV, Ye.I.; NEUDACHIN, G.I.; PETUKHOVA, R.I.

Analysis of magnesiten by a spectral method. Zav. lab. 29
no.6:695-696 '63. (MIRA 16:6)

1. Beloretskiy metallurgicheskiy kombinat.
(Magnesite—Spectra)

NEKRASHOV, G.I., Doctor, ANATOLIOV, V.I., Tech.

Problems in the theoretical analysis of the performance of
single-action hydraulic percussion boring mechanisms. 199.
vys. ucheb. zav. i sot. zhar. 2 no.7:107-109 1965. (MIRA 1414)

1. Zaslavskiy, Georgiy Andreevich, 1930, Moscow
Kavkazskiy tekhnicheskii universitet.

NEUDACHIN, G.I.

Approximate method of calculating hydropercussive boring mechanisms
with a bivalve system of distributing the flushing fluid. Izv.vys.
ucheb.zav.; geol. i razv. 8 no.1:130-136. Ja '65. (MIRA 18:3)

1. Stambitskiy, Georgiy Institut im. V.V. Dokuchaeva.

NEUDACHIN, G.I.; KOLENOVETS, A.V.

Sinking hydraulic vibrator for eliminating accidents in
core drilling. Izvved. i otn. no. 30 no. 8: 31-32 Ag. 1971.
(SIA 17:10)

1. Sverdlovskiy gosnyy institut.

NEUDACHIN, G.I.; KURKOV, G.A.; SULTANOV, B.Z.; KOLOMOYETS, A.V.

Practice of using double-column vacuum pipes. Razved. i okh. nedr
29 no.9:54 S '63. (MIRA 16:10)

1. Sverdlovskiy gornyy institut.

NEUDACHIN, G.I.; SHOLOKHOV, L.G.

Double core barrel drills for shot and hard alloy drilling. Izv.vys.ucheb.zav.; geol.i razv. 2 no.11:101-107
N '59. (MIRA 13:6)

1. Sverdlovskiy gornyy institut.
(Boring machinery)

ARASHKEVICH, V.M., dotsent; VESELOV, A.I., professor; VOLOTKOVSKIY, S.A., professor; ZHUKOV, L.I., dotsent; IPPOLITOV, M.D., dotsent; KUTYUKHIN, P.I., dotsent; KOMPANEYETS, V.P., dotsent; MALAKHOV, A.Ye., professor; NEUDACHIN, G.I., dotsent; RYABUKHIN, G.Ye., professor; SAKOVTSYEV, G.P., dotsent; STOYLOV, B.A., dotsent; TROP, A.Ye., dotsent; FEDOROV, S.A., professor; YAROSH, A.Ye., dotsent, redaktor; TARKHOV, A.G., redaktor; GAMBURTSYVA, Ye.Ye., redaktor; GUROVA, O.A., tekhnicheskii redaktor.

[Collection of articles on geophysical methods of prospecting]
Sbornik statei po geofizicheskim metodam razvedki. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1955. 109 p.
(MLRA 8:11)

1. Sverdlovsk. Gornyy institut.
(Prospecting---Geophysical methods)

ILLEGIBLE

L 38335-66 EWT(d)/T IJP(c)

ACC NR: AP6027993

SOURCE CODE: CZ/0045/66/000/001/0021/0030

AUTHOR: Neubrunn, Tibor (Bratislava)

ORG: Department of Mathematical Analysis, Faculty of Natural Sciences, Komonsky
University, Bratislava (Katedra matematickej analyzy, Prirodovedeska Fakulta,
Univerzita Komenského)

TITLE: Note on absolute continuity of measures

SOURCE: Matematicko-fyzikalny casopis, no. 1, 1966, 21-30

TOPIC TAGS: measure theory, asymptotic property, continuous function

ABSTRACT: The paper deals with questions related to the absolute continuity and to the asymptotic absolute continuity of measures. A theorem on a τ -dominated system of σ -ideals is proved. [Based on author's Eng. abst.] [JPRS: 36,845]

SUB CODE: 12 / SUBM DATE: 03Dec64 / SOV REF: 001 / OTH REF: 004

Card 1/1

NFUBRUNN, T.

On metric spaces associated with measure spaces. Zeta 1961
Univ Com 7 no.12:663-673 '65.

1. Katedra matematiky, Univerzita Komenského, Bratislava,
Smeralova 2.

NEUBERTOVA, K.

CZECHOSLOVAKIA

MLADEK, A., MD; NEUBERTOVA, K., MD.

1. First Surgical Clinic of the Faculty of General Medicine of Charles University (I. Chirurgická klinika fakulty všeobecného lékařství KU), Prague; 2. Surgical Clinic of the Medical Faculty of Charles University (Chirurgická klinika lékařské fakulty KU), Hradec Králové (for all)

Prague, Praktický lékař, No 10, 1963, pp 365-368

"Traumatic Disorders of the Heart."

KRYL, R.; NEUBERTOVA, E.

Long-acting sulfonamides. Cas. lek. cesk. 101 no. 46: Lek Veda Zahr:
232-240 '62.

1. Klinika infekcnych nemocí lekárske fakulty hygienickej KU v Praze,
prednosta prof. dr. V. Kredba.
(SULFONAMIDES)

KRYL,R.; NEUBERTOVA,E.; BERANOVA,Z.

Sulfamethoxidine. Experimental and clinical experiences with the new Czechoslovakian sulfonamide 2-sulfanilamido-5-methoxy-pyrimidine. Cas.lek. cesk. 103 no.14:366-373 3 Ap'64

1. Klinika infekcnich nemoci lekarske fakulty hygienicke KU, Praha-Bulovka (prednosta: prof. dr. V.Kredba) a Ustredni biochemicke laboratore nemocnice na Bulovce, Praha 8, (vedouci: MUDr. K.Masek).

2

NEUBERT, B.

Relationship of sugar intake to the occurrence of dental caries in a national sample of healthy children. *JAMA* 1990; 263: 1007-1011. **OBJECTIVE:** To determine the relationship of dietary sugar intake to the occurrence of dental caries in a national sample of healthy children. **DESIGN:** Cross-sectional study. **SETTING:** National Health and Medical Research Council (NH&MRC) survey of 11,000 children aged 5 to 17 years. **MEASUREMENTS AND MAIN RESULTS:** The 2 highest quintiles of total sugar intake were associated with a 2.5-fold increase in the prevalence of dental caries above the upper limits of 12 and 16.5%. With increasing intake of total sugar and CSF sugar, the prevalence of dental caries increased from 10% to 24% and 14% to 28%, respectively. **CONCLUSIONS:** The relationship between

HUNGARY/Physical Chemistry. Crystals.

B-5

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42449.

varieties of coal are almost identical in chemical structure and differ only in the proportions of aromatic and aliphatic portions of the structure.

Card : 3/3

D-5

HUNGARY/Physical Chemistry. Crystals.

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42449.

Number of C-atoms is of about 40 with a molecular weight of the unit of 500. During carbonization the molecular weight of the units changes from 600 with 80% C to 500 with 93-94% C. Carbonization takes place in 2 phases: 1) on increase of C from 80 to 88% the H_2 content and specific volume of hydrocarbon framework are approximately constant and change in structure is effected essentially by a change in the amount of O from 12 to 4%; 2) on change in C from 88 to 94% specific volume decreases, content of H decreases from 5 to 3%, there takes place a breakdown of the aliphatic portion. Degree of condensation of aromatic nuclei during carbonization increases only slightly. Different petrographic

Card : 2/3

HUNGARY/Physical Chemistry. Crystals.

8-5

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42449.

Author : Heredy L., Neuberger V., Rona V.
Inst : Hungarian Academy of Sciences.
Title : The Structure of Coal.

Orig Pub: Acta chim. Acad. sci. hung., 1957, 12, No 1,
35-56.

Abstract: On the basis of a modified equation of Franklin (Franklin R. E., Fuel, 1948, 27, 46) for the correlation between specific volumes and H content, the following conclusions are arrived at concerning structure and carbonization process of coal. Coal is considered to be a supercooled liquid. Structural units of coal consist of aromatic nuclei with added, aliphatically bonded, CH_2 -groups.

Card : 1/3

NEUBERGER, Gideon, ing. principal (Bucuresti)

Aspects of chemical water control in thermal power plants.
Energetica Rum 11 no.2:74-77 F '63.

1. I.R.M.E.

NEUBERGER, G., ing.

Criteria on the new draft of Chapter 16, Water Treatment, of
the Technical Exploitation Prescription. Energetica num 12 no.
4:172-175 Ap '64.

1. Head of the Office of Chemical Rationalizations, Enterprise
for Electric Power Rationalization and Modernization.

NEUBERGER, G.

RUMANIA / Chemical Technology. Chemical Products and Their Application. Corrosion. Protection from Corrosion. H

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 64790

Author : Neuberger G

Inst : -

Title : Factors That Cause and Accelerated Corrosive Processes

Orig Pub: Energetica, 1957, 5, No 11, 534-545

Abstract: Basic factors were studied that influence corrosive processes taking place in steam kettles: the influence of the pH of solutions, the content of solute O_2 , the presence of an acceleration or a

Card 1/2

GULYAKIN, I.V., prof., doktor biolog. nauk.; YUDINTSEVA, Ye.V., kand. biolog. nauk, starshiy nauchnyy sotrudnik: NEUBERG, Ya., aspirant; LEVINA, E.M., nauchnyy sotrudnik

Investigating the proportion between strontium-90 and calcium
in soils and in plants. Izv. TSEKhA no.5:29-46 '59 (MIRA 13:3)
(Calcium) (Strontium) (Plants--Assimilation)

NEUBERG, Yaroslav, Cand Agric Sci (diss) -- "Problems of the agrochemistry of strontium-90". Moscow, 1959. 17 pp (Moscow Order of Lenin Agric Acad im K. A. Timiryazev), 100 copies (KL, No 9, 1960, 127)

NEUBERG, Jaroslav, inz., C.Sc.; HOMOLA, Vaclav, inz.

Research on combined fertilizers in Czechoslovakia. Agrochem 2
no.1:3-7. '62.

1. Ceskoslovenska akademie zemědělských věd, Vyzkumný ústav rostlinné
výroby, Praha-Ruzyne.

NEUBERG, Jaroslav, inz., CSc.

Tasks of research on plant nutrition during the intensification of agricultural production. Rost vyroba 9 no.11:1127-1128 M '63.

1. Ustredni vyzkumny ustav rostlinne vyroby, Ruzyne.

Neuberg, J.

AGRICULTURE

A Moscow conference on the application of isotopes in agriculture. p. 299

Vol. 5, no. 6, 1958

Monthly Index of East European Accessions (MEAI) LC, Vol. 8, No. 4, April 1959

For a further increase in the yield of agricultural plants. p. 302.

NEUBER, B.

NEUBER, B. Loading and unloading technique in the Scandinavian countries.
Tr. from the German. p. 91.

Vol. 12, no. 2, Feb. 1956

LES

AGRICULTURE

Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

DAMBORSKA, M.; NEUBAUEROVA, H.; detska sentra P. Stepanova

Development of vision in the 2d quarter year of life. Cesk. pediat.
16 no.6:496-501 Je '61.

1. Kojensky ustav Luhacovice, reditelka MUDr. M. Damborska.

(VISION in infancy & childhood)
(EYE in infancy & childhood)

DAMBORSKA, M.; NEUBAUEROVA, H.

Perez reflex. Cesk.pediat. 15 no.4:333-338 Ap '60.

1. Statni kojensky ustav Luhacovice, reditelka MUDr. M. Damborska.
(REFLEX)

ILLEGIBLE

YUGOSLAVIA

Prof Dr R. NEUBAUER and Dr D. SAVIC [Affiliation same as above.]

"Tuberculosis in Yugoslavia. Status and Trends of Tuberculosis and Anti-Tuberculosis Service."

Belgrade, Narodno Zdravlje, Vol 19, No 5, 1963; pp 152-159.

Abstract : Continuation of study on a very vast scale. Many aspects are discussed here, e.g. inadequacy of places in hospitals and of beds at home (41% of the patients with tuberculosis in Yugoslavia still share their beds with other persons in the family!) detailed discussion of various regional inadequacies and needs, improper emphasis in use of funds, staff and equipment, patterns and needs of occupational therapy efforts; tables show e.g. number of patient visits for Yugoslavia as a whole and by 9 administrative divisions, also by various diagnostic classifications. Six tables.

1/1

2463, 2542

YUGOSLAVIA

NEUTAJER, Prof Dr R., and Dr D. SAVIC, Federal Public
Health Institute (Savezni Zavod za Zdravstvenu Zastitu).

"Tuberculosis in Yugoslavia."

Belgrade, Narodno Zdravlje, Vol 19, No 4, 1963, pp 113-124.

Abstract: The authors continue their series of articles by discussing tuberculosis as a socio-economic problem (in terms of the loss to the national economy through death, absenteeism, and invalidism) and the current state of the anti-tuberculosis service in terms of institutions (the authors find that the overall number of anti-tuberculosis dispensaries should be increased 50 percent, with concentration on the Kosmet and Macedonia, to meet the modest requirement of one such dispensary per 40,000 inhabitants) and personnel (the authors find that physicians are overburdened with administrative detail and that there is inadequate cooperation between hospital and dispensary personnel dealing with tuberculosis). Several tables and p/1/charts, no references.

YUGOSLAVIA

Prof Dr R. NEUBAUER and Dr D. SAVIC, Federal Institute for Health Protection (Savezni zavod za zdravstvenu zastitu).

"Tuberculosis in the FNRJ. The Status and Trends of Tuberculosis and Anti-Tuberculosis Service."

Belgrade, Narodno Zdravlje, Vol 19, No 3, 1963; pp 77-87.

Abstract : Data and discussion of adequacy of examinations of high-risk contacts (family of patients with active tuberculosis, health personnel caring therefor) ranging from 100% in Slovenia to 15% in Montenegro; mass screening (insufficient number of mobile x-ray units, inadequate methods of film processing;) vaccination (use of domestic BCG is often inconsistent even in hospital-born newborns;) tuberculin testing; bovine tuberculosis which is not a key problem in Yugoslavia. Slovenia continues to lead other republics in public health measures but over-all situation is improving albeit slowly. Map, 7 tables, 5 graphs.

1/1

NEUBAUER, Robert

Epidemiological aspects of tuberculosis in children. Tuberkuloza
no.1:88-97 '62.

(TUBERCULOSIS IN CHILDHOOD)

NEUBAUER, R.; KARLIN, M.; KORSIKA, L.; FILIPEC, L.; KOMAR, M.; HANUT, E.

Certain considerations on the recurrence of pulmonary tuberculosis.
Tuberkuloza, Beogr. 11 no.3:318-327 '59.

1. Ftizioloska klinika, Ljubljana; Bolnica za tuberkulozu, Sezana.
(TUBERCULOSIS PULMONARY therapy)

EXCERPTA MEDICA Sec. 6 Vol. 11/8 Aug. 57

NEUBAUER R.

4910. PÓR F., NEUBAUER R., MERATEN A. and STÁNČÁKOVÁ A. Int. Klin. KU, Košice. Príspevok k otázke elektrolytového zloženia svalu u chronickej renálnej insuficiencie. Contribution to the question of electrolytic composition of the muscles in chronic renal insufficiency VNITR. LÉK. 1957, 3/2 (149-155) Tables 1

Eight cases of chronic renal insufficiency were followed up. Not only the level of extracellular but also that of intracellular electrolytes was estimated: The latter by means of muscle biopsy. In the first group of patients extracellular hydration was found simultaneously with intracellular dehydration. In the 2nd group a relative intracellular hydration set in during extracellular dehydration. Intracellular potassium was lowered in all cases, intracellular sodium only in patients with pronounced uraemia. In the 3rd group sodium entered the cells. The course of the shifting of water and electrolytes in chronic renal insufficiency is discussed and the difficulties of muscle biopsy are stressed.

NIUBAUER, Robert, Prof., dr., (Ljubljana)

Tuberculosis today. Med. glasn. 10 no.11-12:436-441 Nov-Dec
56.

(TUBERCULOSIS, statist.
(Ser))

NEUBAUER, Pal, dr.; KERENYI, Andras

Experiences of the centralized branch management on the Hajdu-
Bihar County state farms; a polemic article. Munka szemle 6
no.8:24-31 Ag '62.

NEUBAUER, M.; DUBEN, J.

Haemophilus influenzae and its importance in clinical practice. I. Microbiological - epidemiological aspects. Cesk. epidem. 13 no.3:183-188 My'64

1. Mikrobiologicke oddeleni OHES [Okresni hygienicko-epidemiologicke stanice], Havlickuv Brod.

NEUBAUER, M.; DIBEN, J.

Haemophilus influenzae and its importance in clinical practice.
II. Pathogenesis. Cesk. epidem. 13 no.5:308-311, 1968.

1. Mikrobiologické oddelení Okresní hygienické-epidemiologické
stanice, Havlíčkův Brod.

NEUBAUER, M.; KUBAT, Z.

Role of diptheroid microorganisms in the etiology of inflammatory eye diseases. Sborn. lek. 64 no.8/9:258-261 Ag '62.

1. Mikrobiologicke oddeleni OHES v Havlicko Brode, prednosta dr. J. Duben
I. ocní klinika fakulty vseobecného lékařství University Karlovy v Praze,
prednosta prof. dr. E. Dienstbier.
(OPHTHALMIA microbiol) (CORYNEBACTERIUM infect)

NEUBAUER, M.; KUBAT, Z.

Contagious pneumococcal pharyngoconjunctivitis. Sborn. lek. 63 no.7/8:
~~291-210 221-61.~~

1. Mikrobiologicke oddeleni OHES v Havlikove Brode, prednosta MUDr.
J.Duben I. očni klinika fakulty vseobecneho lekarstvi University
Karlovy v Praze, prednosta prof. dr. E.Dienstbier.
(PHARYNGITIS etiol.) (CONJUNCTIVITIS etiol.)
(PNEUMOCOCCAL INFECTIONS physiol.)

KUBAT, Zdenek; NEUBAUER, Miloslav

Bacteriology of external inflammatory eye diseases and some notes on their treatment. II. Therapy. Cesk. oft. 17 no.6:454-460 S '61.

- 4 1. Očni oddeleni OUNZ v Havlickove Brode, prednosta MUDr. R. Wagner, Mikrobiologicke oddeleni OHES v Havlickove Brode, prednosta MUDr. J. Duben.

(EYE microbiol)

KUBAT, Zdenek; NEUBAUER, Miloslav

Bacteriology of external inflammatory eye diseases and some notes on their treatment. I. Etiology. Cesk. ofth. 17 no.6:450-453 S '61.

1. Oční oddělení OUNZ v Havlíčkově Brodě, přednosta MUDr. R. Wagner, Mikrobiologické oddělení OHES v Havlíčkově Brodě, přednosta MUDr. J. Duben.

(EYE microbiol)

KUBAT, Zdenek, ~~NEUBAUER~~, Miloslav

A contribution to the etiology of external inflammatory diseases
of the eye. Cesk.ofth.16 no.7:401-403 N'60.

1. Oční oddělení OUNZ v Havlickove Brode, prednosta MUDr.R.Wagner.
Mikrobiologicke oddeleni OHES v Havlickove Brode, prednosta
MUDr. J. Duben.
(OPHTHALMOLOGY etiol)

NEUFELDER, M.; DUBEN, J.; BILLOVSKA, J.

Intestinal Clostridium infections. Cesk. epidem. mikrob. imun. 8
no,2:107-112 Mar 59.

1. Mikrobiologické oddelení OHES v Havlickove Brode, Infekční odd.
OÚNZ v Havlickove Brode. M.N., Mikrobiol. oddel. OHES, Havlickuv
Brod.

(CLOSTRIDIUM PERFRINGENS, infect.
diarrhea (Cz))

(DIARRHEA, microbiol.
Clostridium perfringens (Cz))

DUBEN, Josef; NEUBAUER, Miloslav; GALLEROVA, Blanka za technicke spoluprace
A. Novotne.

Two cases of herpangina with isolation of a group A Cocksackie virus.
Cesk. epidem. mikrob. imun 7 no.4:231-234 July 58.
(HERPANGINA, case reports
isolation of group a Cocksackie virus (Cz))

NEUBAUER, Miloslav; DUBEN, Josef; DUBEN, Zdenek

Angina due to Pasteurella. Cesk. epidem. mikrob. imun.
6 no.3:183-185 May 57.

1. Mikrobiol. oddel. KHES v Havlickove Brode Veterinarni
stredisko, Caslav.

(TONSILLITIS, etiol. & pathogen.

Pasteurella multocida (Cz))

(PASTEURILLA, infect.

P. multocida infect. causing tonsillitis (Cz))

DUBEN, Josef; NEUBAUER, Miloslav; DUBEN, Zdenek

Corynebacterium pyogenes bovis; a comparison of the strains of animal origin with human variants. Cesk. epidem. mikrob. imun. 6 no.3:169-178 May 57.

1. Mikrobiol. oddeleni OHES v Havlickove Brode, Veterinarni stredisko v Caslavi.

(CORYNEBACTERIUM

pyogenes bovis, comparison of strains of animal origin with human variants (Cz))

NEUBAUER, M.¹⁰⁵; KRAL, J.

Green's theorem; a report on the lecture given by Dr. Jan Marik before the meeting of the Prague Circle of Mathematicians on March 26, 1956. p. 476.
(Casopis Pro Pestovani Matematiky. Vol.51, no.4, Nov. 1956. Para, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) IC, Vol.6, no.6, June 1957. Uncl.

NEUBAUER, M.

Section of the Quaternary sediments of the Svatka River
northeast of Vranovice. Sbor zem 68 no.2:169-172 '63.

NEUBAUER, M.; KOURIL, Z.

"Hydrogeological conditions of the Miocene between Miroslav and Suchohrady."

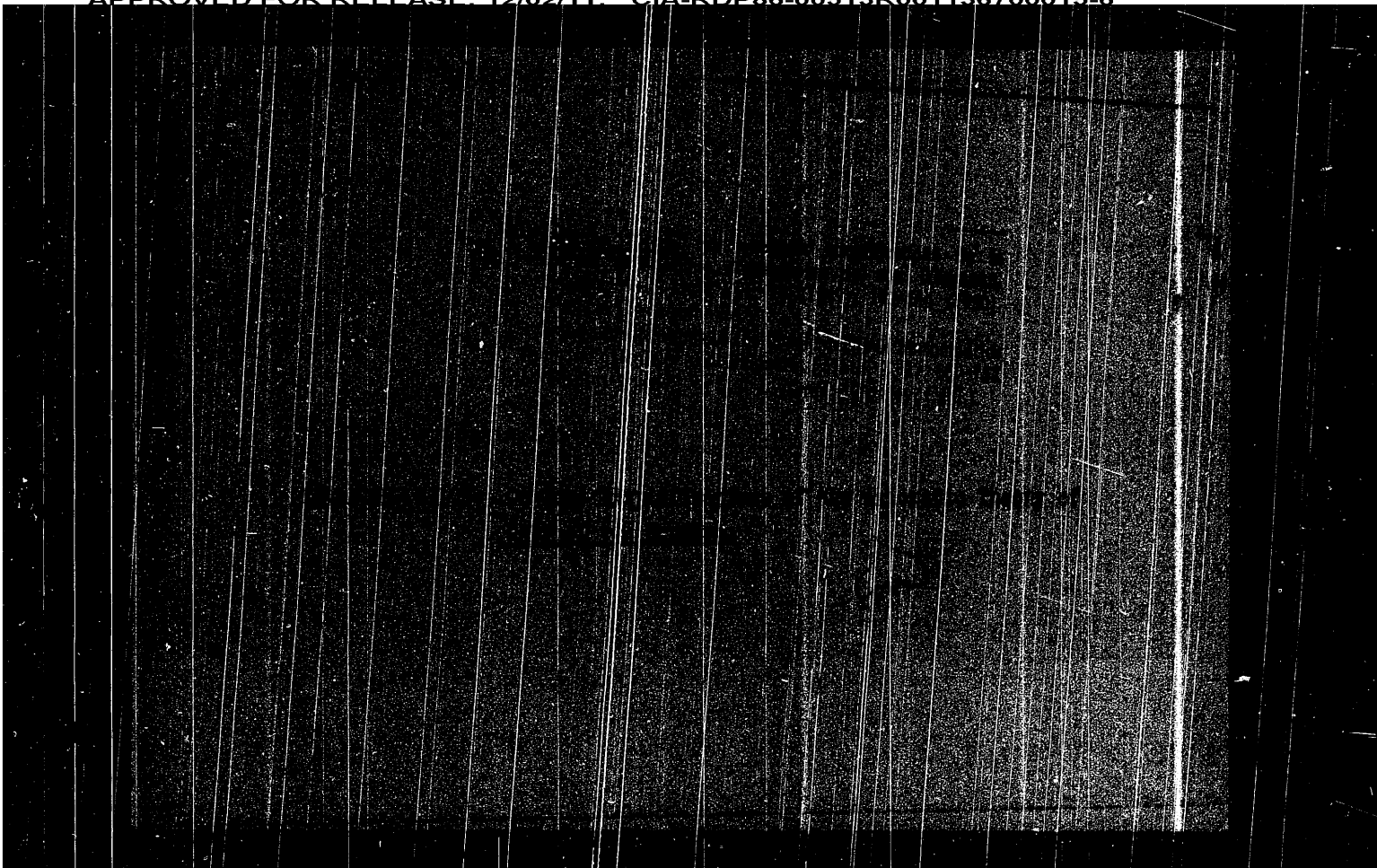
p.394 (Casopis Pro Mineralogii A Geologii, Vol. 2, no. 4, 1957, Praha,
Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

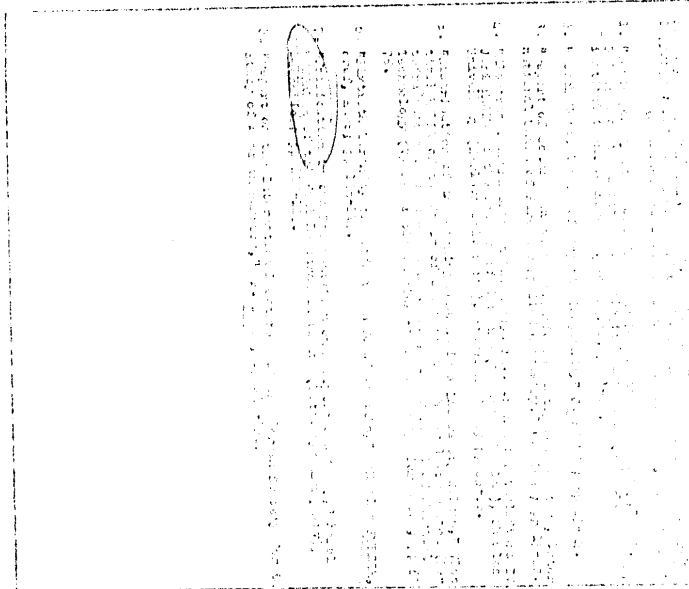
MARIK, Jan (Praha); NEUBAUER, Milos (Praha)

Series with nonnegative members. Cas pro pest mat 85 no.2:188-197
My '60. (EEAI 9:10)
(Series)

APPROVED FOR RELEASE: 12/02/11: CIA-RDP86-00513R001136700015-6



NEUBAUER, K.



YUGOSLAVIA

Dr Jozse NEUBAUER, Department of Internal Medicine, General Hospital
(Interni oddelek Obce bolnice), Ptuj.

"Alimentary Lead Intoxications."

Zagreb, Lijecknicki Vjesnik, Vol 35, No 2, 1963; pp 139-148.

Abstract [German summary modified]: Review of clinical data on 40 patients with chronic saturnism; in 38 definitely attributable to lead-glazed earthenware pottery. Only 2 were correctly diagnosed by referring physician, but the gray gingival line was pathognomonic in all. The German exchange resin Mosatil was used not only diagnostically but also as therapy. Map, 2 tables, 4 graphs; 2 German and 7 Yugoslav references.

FUCHS, Erik, dr.; NEUBAUER, Iren

Lattice distortion determination of polycrystalline materials
by X-ray diffraction. Meres automat 12 no.10:307-314 1964.

1. Iron Industry Research Institute, Budapest.

12
CZECHOSLOVAKIA

NEUBAUER, E; MADAR, J.

Internal Medicine Clinic of P. J. Safarik Clinic (Internal
klinika Univ. P. J. Safarika), Kosici (for both)

Prague, Vnitřní lékařství, No 12, 1963, pp 1190-1194

"Renal Haemodynamics in Chronic Cor Pulmonale."

NEUBAUER, E.; POR, Fr.; KLVANOVA, H.

Antidiuretic hormone in the serum of diabetes insipidus patients following injection of novocain. Activ. nerv. sup. 4 no.3/4:388-393 '62.

1. Faculty of Medicine, P.J. Safarik University, Kosice.
(VASOPRESSIN) (PROCAINE) (DIABETES INSIPIDUS)

NEUBAUER, E.; POR, Fr.; KLVANOVA, H.

Preliminary studies on the titration of the antidiuretic hormone in the blood serum of diabetes insipidus patients after the injection of novocaine. Cas. Lek. Cesk. 100 no.49:1541-1545 8 D '61.

1. Interna klinika lekarskej fakulty University P. J. Safarika v Kosiciach, prednosta doc. MUDr. Fr. Por.

(VASOPRESSIN blood) (DIABETES INSIPIDUS blood)
(PROCAINE pharmacol)

NEUBAUER, E.; POR, Fr.

Level of antidiuretic hormone in the blood of diabetes insipidus patients in liver disorders. Cas. lek. cesk. 98 no.32-33:1006-1008 14 Aug 59.

1. Interna klinika LFUK v Kociciach, prednosta doc. dr. Fr. Por.
(DIABETES INSIPIDUS, compl.)
(LIVER DISEASES, compl.)
(VASOPRESSIN, blood)

NEUBAUER, E.; MENSTEN, A.

Electrolyte clearance in chronic renal insufficiency. Cas. lek. cesk.
97 no.12:380-384 21 Mar 58.

1. Interna klinika UK v Kosciciach, prednosta doc. Fr. Por.
(GLOMERULONEPHRITIS, blood in
electrolyte clearance (Gz))
(ELECTROLYTES, in blood
clearance in glomerulonephritis (Gz))

NEUBAUER, E.

SIMKO, J.; NEUBAUER, E.; SEDIK, J.

Effect of strenuous muscular exercise on hepatic & renal function in pregnant women. Cesk. gyn. 23[37] no.3:198-202 Apr 58.

1. Por. gyn. kl. v Kosiciach, pred. prof. Dr. T. Schwarz. - Int. kl. PLFUK v Kosiciach, pred. doc. Dr. F. Por. J. S., Kosice, Moysesova 9.

(EXERCISE, eff.

strenuous exercise on liver & kidney funct. in pregn. (Cz))

(LIVER, in pregn.

eff. of strenuous musc. exercise (Cz))

(KIDNEYS, in pregn.

same))

(PREGNANCY, physiol.

eff. of strenuous musc. exercise on liver & kidney funct. (Cz))